

5  
CLAIMS

1. A method of managing acoustic feedback in a hearing aid, characterised by
  - 5 • using a multi (two or more) channel type of filter hereby splitting the frequency range up in two or more separate parts
  - determining the maximum allowable gain in at least one frequency range before feedback occurs
  - monitoring the volume control in such a way, that if the maximum
  - 10 allowable gain before feedback occurs is reached or exceeded, the gain is manipulated for an offending frequency range.
2. A method according to claim 1, characterized in that the determination of maximum allowable gain and the monitoring of the volume control is applied
- 15 for several channels.
3. A method according to claim 1 or 2, characterised in that the multi channel filter is of 1. st order or higher.
- 20 4. A method according to claim 1, 2 or 3, characterised in that the multi channel filter is used for feedback management or for adaptation purposes or both.
5. A method according to any of the claims 1-4, characterized in that the gain
- 25 in a manipulated frequency range is kept constant or only increased slightly.
6. A hearing aid comprising a housing containing a microphone, an amplifier in connection with the microphone, a receiver in connection with the amplifier, characterized in that the amplifier comprises a multi channel type of
- 30 filter, a control system for monitoring the gain in at least one channel, and control means for controlling the volume control in the at least one channel.

7. A hearing aid according to claim 6, characterized in that the determining of the maximum gain before feedback occurs and the controlling the volume control is applied for several channels.

5 8. A hearing aid according to claim 6 or 7, characterized in that the multi channel filter is of 1. st order or higher order.

9. A hearing aid according to claim 6,7 or 8, characterized in that the multi channel filter is adapted for both feedback management and adaptation  
10 purposes.